UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,314	01/28/2004	Stuart Lynch Blackburn	1033-NW1001	1206

34456	7590	12/27/2005	

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EXAMINER
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ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		10/766,314	BLACKBURN, STUART LYNCH
		Examiner	Art Unit
		Shick C. Horn	2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/6/05, 10/21/05*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1-16 have been

considered but are moot in view of the new ground(s) of

rejection.

2.   The nonstatutory double patenting rejection is based on a
judicially created doctrine grounded in public policy (a policy
reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by
a patent and to prevent possible harassment by multiple
assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010
(Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed.
Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA
1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and,
In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
      A timely filed terminal disclaimer in compliance with 37
CFR 1.321(c) may be used to overcome an actual or provisional
rejection based on a nonstatutory double patenting ground
provided the conflicting application or patent is shown to be
commonly owned with this application. See 37 CFR 1.130(b).
      Effective January 1, 1994, a registered attorney or agent
of record may sign a terminal disclaimer. A terminal disclaimer
signed by the assignee must fully comply with 37 CFR 3.73(b).

3.   Claims 1-16 are provisionally rejected under the judicially

created doctrine of obviousness-type double patenting as being

unpatentable over claims 1-10 and 12-17 of copending Application

No. 10/842,842. Although the conflicting claims are not

identical, they are not patentably distinct from each other

because of the following:

For claims 1-6, the claims 1-6 of copending application
10/842,842 disclose a method of configuring a data network, the
method comprising: determining a bandwidth capacity of a
communications link connecting a digital subscriber line access
multiplexer (DSLAM) and an asynchronous transfer mode (ATM)
switch based on a first user type selected from a plurality of
user types, each of the plurality of user types having a
different bandwidth capacity; determining an average peak
bandwidth per user value based on the first user type;
determining a data transmission slowdown indicator that includes
a slowdown amount and a probability of experiencing a slowdown
event; determining an estimated maximum number of users of the
first user type for digital subscriber lines that may be
supported by the DSLAM, where the estimated maximum number of
users of digital subscriber lines is based on the average peak
bandwidth per user value, the bandwidth capacity of the
communication link, and the customer data transmission slowdown
indicator; and configuring the data network such that the DRAM
has a configured number of users of digital subscriber lines
that is less than or equal to the estimated maximum number of
users of digital subscriber lines (see claim 1);

wherein the estimated maximum number of users of digital

subscriber lines is further based on a probability of a random

user downloading data at a given period of time (see claim 2);

wherein the estimated maximum number of users of digital

subscriber lines is further based on an Erlang model calculation

(see claim 3);

wherein the communication link is one or more DS3 type

communication links or an OC3 type communication link (see claim

4);

wherein the estimated maximum number of users of digital

subscriber lines is calculated with an assumption that a first

set of users of the first user type download data at the same

data transfer speed and a second set of user having a second

user type download data at a different data transfer speed (see

claim 5);

wherein the data transfer speed is about 1.5 Mbits/second and

wherein the different data transfer speed is at least one of an

integer multiple of 1.5 Mbits/second, an integer multiple of 384

kb/second, or an integer multiple of 192 kb/second (see claim

6).

For claims 7-9, the claims 7-9 of copending application

10/842,842 disclose a method of configuring a data network, the

method comprising: determining a user type selected from a set

of available user types, each of the available user types

associated with a different bandwidth capacity; determining an

average peak bandwidth per user value for the data network and

based on the user type; determining a capacity of a

communication link connecting a remote terminal (RT) to

asynchronous transfer mode (ATM) switch via an optical

concentrator device, the capacity based on the bandwidth

capacity associated with the user type; determining a data

transmission slowdown indicator that includes a slowdown amount

and a probability of experiencing a slowdown event; determining

an estimated maximum number of users that may be supported by

the RT, where the estimated maximum number of users is based on

the average peak bandwidth per user value, the capacity of the

communication link, and the customer data transmission slowdown

indicator; and configuring the data network such that the RT has

a configured number of users of the subscriber lines that is

less than or equal to the estimated maximum number of users that

may be supported by the RT (see claim 7);

wherein the communication link comprises a plurality of T1

transmission lines (see claim 8);

wherein the communication link comprises one of an OC3 and one

or more DS3 links (see claim 9).

For claim 10, the claim 10 of copending application 10/842,842
disclose a data communications system comprising: a plurality of
digital subscriber lines; a digital subscriber line multiplexer
coupled to each of the plurality of digital subscriber lines;
and a data switch coupled to the digital subscriber line
multiplexer via a communication link; wherein the data
communications system is configured such that the number of
digital subscriber line users supported by the digital
subscriber line multiplexer is determined based on an estimated
maximum number of users, the estimated maximum number of users
determined based on an average peak bandwidth per user value, a
data communication capacity of the communication link, and a
data transmission slowdown indicator, wherein the data
communication capacity is determined based on a type of user
selected from a set of available user types (see claim 10).

For claims 11-16, the claims 12-17 of copending application
10/842,842 disclose a data communications system comprising: a
plurality of digital subscriber lines; a remote terminal device
coupled to each of the plurality of digital subscriber lines;
and a data switch coupled to the remote terminal device via a
communication link; wherein the data communications system is

configured such that the number of digital subscriber line users

supported by the remote terminal device is determined based on

an estimated maximum number of users, the estimated maximum

number of users determined based on an average peak bandwidth

per user value, a data communication capacity of the

communication link, and a data transmission slowdown indicator,

wherein the data communication capacity is determined based on a

type of user selected from a set of available user types (see

claim 12);

wherein the estimated maximum number of users of digital

subscriber lines is further based on a probability of a random

user downloading data at a given period of time (see claim 13);

wherein the estimated maximum number of users of digital

subscriber lines is further based on an Erlang model calculation

(see claim 14);

wherein the communication link is one or more DS3 type

communication links, an OC3 type communication link, or one or

more T1 type communication links (see claim 15);

wherein the estimated maximum number of users of digital

subscriber lines is calculated with an assumption that a

plurality of different users having the same user type download

data al: the same data transfer speed (see claim 16);

wherein the data transfer speed for the user type is about 1.5
Mbits/second (see claim 17).

The application's claims 1-6 merely broaden the scope of
copending application number 10/842,842 claims 1-6,
respectively, by eliminating the step of determining a bandwidth
capacity being based on a first user type selected from a
plurality of user types, each of the plurality of user types
having a different bandwidth capacity as in claim 1, wherein a
second user type download data at a different data transfer
speed as in claim 5; and wherein the different data transfer
speed is at least one of an integer multiple of 1.5
Mbits/second, an integer multiple of 384 kb/second, or an
integer multiple of 192 kb/second as in claim 6.

The application's claims 7-9 merely broaden the scope of
copending application number 10/842,842 claims 7-9,
respectively, by eliminating the step of determining a user type
selected from a set of available user types, each of the
available user types associated with a different bandwidth
capacity as in claims 7-9.

The application's claim 10 merely broaden the scope of copending application number 10/842,842 claim 10 by eliminating wherein the data communication capacity is determined based on a type of user selected from a set of available user types as in claim 10.

Likewise, the application's claims 11-16 merely broaden the scope of copending application number 10/842,842 claims 12-17, respectively, by eliminating wherein the data communication capacity is determined based on a type of user selected from a set of available user types as in claim 12.

It has been held that the omission of a element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically
disclosed or described as set forth in section 102 of this title, if the
differences between the subject matter sought to be patented and the prior
art are such that the subject matter as a whole would have been obvious at
the time the invention was made to a person having ordinary skill in the
art to which said subject matter pertains. Patentability shall not be
negatived by the manner in which the invention was made.

5.   Claim 1, 5-7, and 10-11 rejected under 35 U.S.C. 103(a) as

being unpatentable over Gross (2002/0176367) in view of Price

(2002/0163883).

Regarding claims 1, 7, 10-11:

Gross discloses a method of configuring a data network, the

method comprising: determining an average peak bandwidth per

user value for the data network; determining a capacity of a

communication link connecting a digital subscriber line access

multiplexer (DSLAM) and an asynchronous transfer mode (ATM)

switch; determining an estimated maximum number of users of

digital subscriber lines that may be supported by the DSLAM,

where the estimated maximum number of users of digital

subscriber lines is based on the average peak bandwidth per user

value and the capacity of the communication link and configuring

the data network such that the DSLAM has a configured number of

users of digital subscriber lines that is less than or equal to

the estimated maximum number of users of digital subscriber

lines (see paragraph 0006 which recite using knowledge of

network link bandwidth capacities for optimal network

management, utilization and provisioning to avoid potential

bottlenecks in slow paths and to prevent congestion and for

facilitating tunneling, link balancing, among other things, and

paragraph 0024 which recite determining bandwidth of packet

transmission in the non-time synchronized network).

Regarding claims 5-6:

Gross discloses wherein the estimated maximum number of

users of digital subscriber lines is calculated with an

assumption of a data transfer speed associated with a plurality

of users and wherein the data transfer speed is about 1.5

Mbits/second (see paragraphs 0043-0046 which recite the rate of

flow for the users being in the Mbits/second range).

For claims 1, 5-7, and 10-11, Gross discloses all the

subject matter of the claimed invention with the exception of

determining a data transmission slowdown indicator that includes

a slowdown amount and a probability of experiencing a slowdown

event; and wherein the estimated maximum number of users that

may be supported being based on the slowdown indicator.

Price from the same or similar fields of endeavor teach

that it is known to provide the step of determining a data

transmission slowdown indicator that includes a slowdown amount

and a probability of experiencing a slowdown event; and wherein

the estimated maximum number of users that may be supported

being based on the slowdown indicator (see paragraphs 0014-0017

which recite determining the congestion indicator for preventing

call from being made clearly anticipate the data transmission

slowdown indicator used for estimating the maximum number of

users supported by the link). Thus, it would have been obvious

to the person having ordinary skill in the art at the time the

invention was made to provide the step of determining a data

transmission slowdown indicator that includes a slowdown amount

and a probability of experiencing a slowdown event; and wherein

the estimated maximum number of users that may be supported

being based on the slowdown indicator as taught by Price in the

communications method and system of Gross. The step of

determining a data transmission slowdown indicator that includes

a slowdown amount and a probability of experiencing a slowdown

event; and wherein the estimated maximum number of users that

may be supported being based on the slowdown indicator can be

implemented by providing this step of Price in the bandwidth

capacities determining means of Gross. The motivation for

providing the step determining a data transmission slowdown

indicator that includes a slowdown amount and a probability of

experiencing a slowdown event; and wherein the estimated maximum

number of users that may be supported being based on the

slowdown indicator as taught by Price in the communication

method and system of Gross being that it provides more

efficiency for the system since the system can more gracefully

handle congestion by allowing the service provider to determine

the approach of congestion so that an actual congestion

condition does not arise in the system.

Conclusion

6.   The prior art made of record and not relied upon is

considered pertinent to applicant's disclosure.

Hart et al. disclose a method for channel congestion management.

Jayakrishnan et al. disclose monitoring packet flows.

7.   Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Shick C.

Hom whose telephone number is 571-272-3173. The examiner can

normally be reached on Monday to Friday with alternate Fridays

off.

      If attempts to reach the examiner by telephone are

unsuccessful, the examiner's supervisor, Seema Rao can be

reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be
obtained from the Patent Application Information Retrieval
(PAIR) system. Status information for published applications
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access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

SH

DANG TON
PRIMARY EXAMINER